We Claim:

1. A method for transmitting at least one measuring position of a structural element for measuring a characteristic dimension in a microscope, which element is about to be formed on a mask for lithographic projection, which comprises:

defining, in a first user unit, a circuit layout containing the structural element that is to be formed;

transferring the circuit layout into a file with a format in which the structural element that is to be formed is represented by first data information including an allocation of a position to a geometric shape;

generating second data information in the circuit layout transferred into the file;

allocating a second geometric shape to the measuring position in the second data information to prevent the second geometric shape from bringing about the formation of an exposed structure on the mask in the event of an exposure;

transmitting to a second user unit the circuit layout transferred into the file and containing the second data information;

reading, in the second user unit, a measuring position of the second data information in the circuit layout transmitted with the file;

forming a control instruction for an exposure apparatus from the circuit layout;

exposing the mask with a structure pattern; and

finding the structural element on the mask at the measuring position in a measuring device and measuring the characteristic dimension of the structural element by transmitting the mask and the measuring position to a third user unit.

2. The method according to claim 1, which further comprises:

additionally allocating a first transparency to the first geometric shape of the first data information; and

additionally allocating a second transparency different from the first transparency to the second geometric shape of the second data information.

3. The method according to claim 1, which further comprises situating the measuring position in a vicinity of the position

of the first data information of the structural element that is to be formed on the mask.

4. The method according to claim 1, which further comprises configuring the first and second data information as cells in a hierarchical structure of cells, each of the cells including a separate coordinate system with an origin coordinate and each cell being linked with a cell respectively thereabove in the hierarchical structure by a position of a respective origin coordinate in the coordinate system of the higher-ranking cell.

5. The method according to claim 4, which further comprises selecting GDSII as the standardized file exchange format.

6. The method according to claim 1, which further comprises utilizing, as the measuring device, one of the group consisting of a scanning electron microscope, an optical microscope for determining the width of a structural element, and an optical microscope for determining the positional accuracy of a structural element.

7. The method according to claim 1, which further comprises carrying out the steps of the method for a number of structural elements with at least one measuring position, respectively.

8. The method according to claim 7, which further comprises providing the circuit as a memory cell field.

9. The method according to claim 8, which further comprises allocating a structural element located within approximately 10 µm of a margin of the memory cell field to one of the two items of data information of the measuring positions.

10. A method for transmitting a circuit layout including at least one measuring position of a structural element for measuring a characteristic dimension, which element is about to be formed on a mask for lithographic projection, which comprises:

defining, in a first user unit, a circuit layout containing the structural element that is to be formed, the circuit layout including at least a first plane;

transferring the circuit layout into a file with a format in which the structural element that is to be formed is represented by first data information including an allocation of a position to a first geometric shape;

allocating the first data information to the at least one plane;

generating a second plane to which is allocated no further data information representing structural elements that are to be formed;

generating second data information in the second plane including an allocation of a position to a second geometric shape in the circuit layout transferred into the file;

transmitting to a second user unit the circuit layout transferred into the file and containing the second data information;

reading, in the second user unit, a measuring position of the second data information in the circuit layout transmitted with the file;

forming a control instruction for an exposure apparatus from the circuit layout;

exposing the mask with a structure pattern; and

finding the structural element on the mask at the measuring position in a measuring device and measuring the characteristic dimension of the structural element by

transmitting the mask and the measuring position to a third user unit.

11. The method according to claim 10, which further comprises:

additionally allocating a first transparency to the first geometric shape of the first data information; and

additionally allocating a second transparency different from the first transparency to the second geometric shape of the second data information.

12. The method according to claim 10, which further comprises situating the measuring position in a vicinity of the position of the first data information of the structural element that is to be formed on the mask.

13. The method according to claim 10, which further comprises configuring the first and second data information as cells in a hierarchical structure of cells, each of the cells including a separate coordinate system with an origin coordinate and each cell being linked with a cell respectively thereabove in the hierarchical structure by a position of a respective origin coordinate in the coordinate system of the higher-ranking cell.

14. The method according to claim 13, which further comprises selecting GDSII as the standardized file exchange format.

15. The method according to claim 10, which further comprises utilizing, as the measuring device, one of the group consisting of a scanning electron microscope, an optical microscope for determining the width of a structural element, and an optical microscope for determining the positional accuracy of a structural element.

16. The method according to claim 10, which further comprises carrying out the steps of the method for a number of structural elements with at least one measuring position, respectively.

17. The method according to claim 16, which further comprises providing the circuit as a memory cell field.

18. The method according to claim 17, which further comprises allocating a structural element located within approximately 10 µm of a margin of the memory cell field to one of the two items of data information of the measuring positions.

19. A method for transmitting at least one measuring position of a structural element for measuring a characteristic

dimension, which element is about to be formed on a mask for lithographic projection, which comprises:

defining, in a first user unit, a circuit layout with the structural element that is to be formed;

transferring the circuit layout into a file with a format in which the structural element that is to be formed is represented by first data information including an allocation of a position to a geometric shape;

generating second data information in the circuit layout transferred into the file;

allocating a reference string or name to the measuring position in the second data information;

transmitting to a second user unit the circuit layout transferred into the file and containing the second data information;

reading, in the second user unit, the measuring position of the second data information in the circuit layout transmitted with the file with the aid of the reference string or name;

forming a control instruction for an exposure apparatus from the circuit layout;

exposing the mask with a structure pattern; and

finding the structural element on the mask at the measuring position in a measuring device and measuring the characteristic dimension of the structural element by transmitting the mask and the measuring position to a third user unit.

20. A circuit layout for a circuit in a standardized file exchange format for transmission to a user unit for producing a mask and measuring a characteristic dimension of a structural element that is formed on the mask, comprising:

at least one exposure step-formed structural element to be formed on the mask, said structural element being represented in the exchange format by first data information including an allocation of a position to a shape with a content; and

a measuring position for finding said structural element in a measuring step with a measuring device, said measuring position being represented by second data information including an allocation of said measuring position to one of no geometric shape and a geometric shape having an empty

content, said measuring position being represented by locating said second data information in a vicinity of said position of said first data information.

21. The circuit layout according to claim 20, wherein:

said structural element is a plurality of structural elements to be formed;

each of said structural elements is represented by said first data information;

a measuring position represented by said second data information is respectively allocated to each of said structural elements; and

said second data information forms a configuration with periodic intervals in the circuit layout.

22. In a user unit for producing a mask and measuring a characteristic dimension of a structural element that is formed on the mask with a measuring unit, a circuit layout for a circuit in a standardized file exchange format for transmission to the user unit, the circuit layout comprising:

at least one exposure step-formed structural element to be formed on the mask, said structural element being represented in the exchange format by first data information including an allocation of a position to a shape with a content; and

a measuring position for finding said structural element in a measuring step with the measuring device, said measuring position being represented by second data information including an allocation of said measuring position to one of no geometric shape and a geometric shape having an empty content, said measuring position being represented by locating said second data information in a vicinity of said position of said first data information.

23. The circuit layout according to claim 22, wherein:

said structural element is a plurality of structural elements to be formed;

each of said structural elements is represented by said first data information;

a measuring position represented by said second data information is respectively allocated to each of said structural elements; and

said second data information forms a configuration with periodic intervals in the circuit layout.